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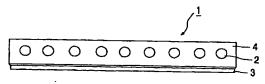
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(54) Title: LUMINAIRE



(57) Abstract: A luminaire comprising at least one light source arranged in a housing for emitting a light beam through a lighttransmitting plate of the housing, with the special feature that said housing is provided with a diffuse reflective coating having a water-based solvent and a binder. The binder is on the basis of either a polymer selected from the group formed by compounds of the following structural formula -[-CR1R2-CR3R4-]-: wherein R1 comprises an element chosen from the group Br, Cl, I, F, H, wherein R² comprises an element chosen from the group Br, Cl, I, F, H, or an alkyl group, wherein R³ comprises an element chosen from the group Br, Cl, I, F, H, or COOCH3, and wherein R4 comprises an element chosen from the group Br, Cl, I, F, H, OH, or vinylether, or an organically modified silane of the sol-gel type, wherein said diffuse reflective coating is applied as a diffuser on the light-transmitting plate.



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G01G1/10

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

	ENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
X	US 2001/040809 A1 (ENTROP JEAN PAUL ET AL) 15 November 2001 (2001-11-15) page 1, paragraph 6-11 page 2, paragraphs 12-14,19	1,3-5,7, 9,10,13, 14	
Y	claims 1-9	1-16	
Υ	US 5 272 601 A (MCKILLIP ROBERT C) 21 December 1993 (1993-12-21) column 1, line 65 - column 2, line 10 column 5, lines 1-19 column 5, line 67 - column 6, line 16; claims 1-7	1-16	
A	US 5 548 182 A (BUNK AXEL ET AL) 20 August 1996 (1996-08-20) column 4, lines 25-52; claims 1-20; figures 1,2	1-16	

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X Further documents are listed in the continuation of box C.	X Patent family members are listed in annex.
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ation) DOCUMENTS CONSIDERED TO BE RELEVANT			
Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.	
CH 473 738 A (JENAER GLASWERK SCHOTT & GEN) 15 June 1969 (1969-06-15) column 1, line 27 - column 3, line 57; claims 1-10		1-16	
US 4 721 877 A (KARINO TOSHIO ET AL) 26 January 1988 (1988-01-26) column 3, line 31 - column 4, line 47; claims 1-4		1-16	
	Citation of document, with Indication, where appropriate, of the relevant passages CH 473 738 A (JENAER GLASWERK SCHOTT & GEN) 15 June 1969 (1969–06–15) column 1, line 27 - column 3, line 57; claims 1-10 US 4 721 877 A (KARINO TOSHIO ET AL) 26 January 1988 (1988–01–26) column 3, line 31 - column 4, line 47; claims 1-4	Chatton of document, with Indication, where appropriate, of the relevant passages CH 473 738 A (JENAER GLASWERK SCHOTT & GEN) 15 June 1969 (1969–06–15) column 1, line 27 - column 3, line 57; claims 1–10 US 4 721 877 A (KARINO TOSHIO ET AL) 26 January 1988 (1988–01–26) column 3, line 31 - column 4, line 47; claims 1–4	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

Fi/IB2004/050361

Patent docum cited in search		Publication date		Patent family member(s)		Publication date
US 200104	0809 A1	15-11-2001	EP	1243847	Δ1	25-09-2002
	112	15 11 2001	ΑŪ	6213601		15-10-2001
			BR	0105571		19-03-2002
			CA	2376127		11-10-2001
			CN	1366593		28-08-2002
			CZ	20014309	A3	13-03-2002
			WO	0175358		11-10-2001
			HU	0202278		28-10-2002
			JP	2003529898		07-10-2003
			MX	PA01012279	A	23-08-2002
			NO	20015911		03-12-2001
			PL US	351119		24-03-2003
				2001040808		15-11-2001
US 527260	1 A	21-12-1993	NONE			
US 554818	2 A	20-08-1996	DE	4401270	 A1	20-07-1995
			DE	59500870		04-12-1997
			EP	0663684		19-07-1995
			HK	1001746		03-07-1998
			HU	70238		28-09-1995
			JP	7220696	Α	18-08-1995
CH 473738	Α	15-06-1969	DE	1183413	В	10-12-1964
US 472187	7 A	26-01-1988	JP	1751099	С	08-04-1993
			JP	4039184		26-06-1992
			JP	61082660		26-04-1986
			JP	1901960		08-02-1995
			JP		В	23-02-1994
			JP	61080202		23-04-1986
			CA	1240219	AI	09-08-1988
			CN De	85107840	A ,B	06-05-1987
			EP	3585008 0176345		06-02-1992
			KR	8904640		02-04-1986
			US	4869927		21-11-1989 26-09-1989